AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (previously presented) A re-keyable lock comprising:

a cylinder rotatably supported in a housing between a locked position and an unlocked position, said cylinder having a longitudinal slot and a transverse channel;

a locking mechanism including a wafer tumbler resiliently supported in said transverse channel and positionable therein between an engaged position wherein said wafer tumbler engages said housing and a disengaged position wherein said wafer tumbler disengages said housing, said wafer tumbler including a base element having an opening formed therethrough which is at least partially aligned with said longitudinal slot, a rider element positionable within said transverse channel relative to said base element and a coupling element integral with the rider element and positionable between a first position wherein said base element is coupled to said rider element and a second position wherein said base element is uncoupled from said rider element; and

a re-keying mechanism operable when said cylinder is in said unlocked position to move said coupling element from said first position to said second position for repositioning said rider element relative to said base element such that the lock is re-keyed.

2. (original) The lock of claim 1, wherein said coupling element comprises a flexible element biased to couple said base element and said rider element, said flexible element being deflectable to uncouple said base element and said rider element.

3. (previously presented) The lock of claim 2, wherein said rider element selectively engages a plurality of engagement formations in said base element, each of said plurality of engagement formations corresponding to a bitting size.

4. (original) The lock of claim 3, wherein each of said plurality of engagement formations comprise a tab.

5. (original) The lock of claim 3, wherein each of said plurality of engagement formations comprise a slot.

6. (currently amended) The lock of claim ~~2~~40, wherein said re-keying ~~mechanism~~ element comprises a re-keying tool insertable into a re-keying slot formed in said cylinder to deflect said flexible element.

7. (original) The lock of claim 6, wherein said re-keying slot is T-shaped.

8. (original) The lock of claim 6, wherein said re-keying tool is tapered.

9. (previously presented) The lock of claim 1, wherein said base element comprises a first body portion and a pair of legs extending therefrom, said pair of legs being received in a mating portion of said transverse channel.

10. (previously presented) The lock of claim 9 further comprising a pair of springs disposed in said mating portion of said transverse channel and engaging said pair of legs to bias said locking mechanism into said engaged position.

11. (original) The lock of claim 9, wherein said rider element comprises a pair of arms extending from a second body portion, said pair of arms capturing said first body portion therebetween.

12. (original) The lock of claim 1, wherein said locking mechanism further comprises a plurality of wafer tumblers, each of said plurality of wafer tumblers resiliently supported in one of a plurality of transverse channels formed in said cylinder.

13. (previously presented) A re-keyable lock comprising:

a cylinder rotatably supported in a housing between a locked position and an unlocked position, said cylinder having a longitudinal slot, a first set of transverse channels and a second set of transverse channels opposingly interlaced with said first set of transverse channels;

a locking mechanism including:

a first set of wafer tumblers resiliently supported in said first set of transverse channels and positionable therein between an engaged position

wherein said first set of wafer tumblers engage said housing and a disengaged position wherein said first set of wafer tumblers disengage said housing; and

a set of second wafer tumblers resiliently supported in said second set of transverse channels and positionable therein between an engaged position wherein said second set of wafer tumblers engage said housing and a disengaged position wherein said second set of wafer tumblers disengage said housing;

each wafer tumbler of said first and second sets of wafer tumblers including a base element having an opening formed therethrough which is at least partially aligned with said longitudinal slot, a rider element positionable within said transverse channel relative to said base element and a coupling element integral with the rider element and positionable between a first position wherein said base element is coupled to said rider element and a second position wherein said base element is uncoupled from said rider element; and

a re-keying mechanism operable when said cylinder is in said unlocked position to move said coupling element from said first position to said second position for repositioning said rider element relative to said base element such that the lock is re-keyed.

14. (original) The lock of claim 13, wherein said coupling element comprises a flexible element biased to couple said base element and said rider element, said flexible element being deflectable to uncouple said base element and said rider element.

15. (previously presented) The lock of claim 14, wherein said rider element selectively engages a plurality of engagement formations in said base element, each of said plurality of engagement formations corresponding to a bitting size.

16. (original) The lock of claim 15, wherein each of said plurality of engagement formations comprise a tab.

17. (original) The lock of claim 15, wherein each of said plurality of engagement formations comprise a slot.

18. (currently amended) The lock of claim ~~14~~41, wherein said re-keying ~~mechanism~~ element comprises a re-keying tool insertable into a re-keying slot formed in said cylinder to deflect said flexible element.

19. (original) The lock of claim 18, wherein said re-keying slot is T-shaped.

20. (original) The lock of claim 18, wherein said re-keying tool is tapered.

21. (previously presented) The lock of claim 13, wherein said base element comprises a first body portion and a pair of legs extending therefrom, said pair of legs being received in a mating portion of said transverse channel.

22. (currently amended) The lock of claim 21 further comprising a pair of springs disposed in said mating portion of said transverse channel and engaging said pair of legs to bias said locking mechanism into said engaged position.

23. (original) The lock of claim 21, wherein said rider element comprises a pair of arms extending from a second body portion, said pair of arms capturing said first body portion therebetween.

24. (previously presented) A re-keyable lock comprising:

a cylinder rotatably supported in a housing, said cylinder having a longitudinal key slot and a plurality of transverse channels;

a locking mechanism positionable between an unlocked position and a locked position, said locking mechanism including a plurality of wafer tumblers resiliently supported in a corresponding one of said plurality of transverse channels, each of said plurality of wafer tumblers including a rider element selectively engagable with a base element in a first engagement position corresponding to a first key and a second engagement position corresponding to a second key; and

a re-keying tool insertable in a re-keying slot centrally offset from the longitudinal key slot , the re-keying tool operable when said locking mechanism is in said unlocked position to disengage each rider element from each base element in said first engagement position and engage each rider element to each base element in said second engagement position.

25. (original) The lock of claim 24, wherein each of said plurality of wafer tumblers includes a first set of wafer tumblers opposingly interlaced with a second set of wafer tumblers.

26. (previously presented) The lock of claim 25, wherein said re-keying tool is associated with said first set of wafer tumblers and a second re-keying tool is insertable in a second re-keying slot and is associated with said second set of wafer tumblers.

27. (previously presented) A method for in-situ re-keying of a lock, the method comprising:

inserting a first key into a key hole of a lock cylinder;

rotating said lock cylinder relative to a housing with said first key to put the lock into a learn position;

inserting a re-keying tool into a re-keying slot of said lock cylinder, said re-keying slot being centrally offset from said key hole;

uncoupling a first element of a wafer tumbler from a second element of said wafer tumbler;

replacing said first key with a second key such that said first element is re-positioned relative to said second element;

coupling said first element to said second element of said wafer tumbler;

rotating said lock cylinder to a locked position with said second key; and

removing said second key.

28. (original) The method of claim 27, wherein coupling includes biasing a flexible element interposed between said first element and said second element to couple said first element to said second element.

29. (original) The method of claim 28, wherein uncoupling includes deflecting said flexible element to uncouple said first element from said second element.

30. (cancelled)

31. (previously presented) The method of claim 29, wherein coupling includes removing said re-keying tool from said re-keying slot.

32. (previously presented) A re-keyable lock comprising:

a cylinder rotatably supported in a housing between a locked position and an unlocked position, said cylinder having a longitudinal key slot and a transverse channel;

a locking mechanism including a wafer tumbler resiliently supported in said transverse channel and positionable therein between an engaged position wherein said wafer tumbler engages said housing and a disengaged position wherein said wafer tumbler disengages said housing, said wafer tumbler including a base element having an opening formed therethrough which is at least partially aligned with said longitudinal key slot, a rider element positionable within said transverse channel relative to said base element and a coupling element positionable between a first position wherein said base element is coupled to said rider element and a second position wherein said base element is uncoupled from said rider element; and

a removable re-keying tool insertable into a re-keying slot formed in said cylinder between said coupling element and said base to deflect said flexible element, the re-keying tool operable when said cylinder is in said unlocked position to move said coupling element from said first position to said second position for repositioning said rider element relative to said base element such that the lock is re-keyed.

33. (previously presented) The re-keyable lock of claim 32, wherein said re-keying slot is centrally offset from said longitudinal key slot.

34. (previously presented) A re-keyable lock comprising:

a cylinder rotatably supported in a housing between a locked position and an unlocked position, said cylinder having a longitudinal slot and a transverse channel;

a locking mechanism including a wafer tumbler resiliently supported in said transverse channel and positionable therein between an engaged position wherein said wafer tumbler engages said housing and a disengaged position wherein said wafer tumbler disengages said housing, said wafer tumbler including a base element having an opening formed therethrough which is at least partially aligned with said longitudinal slot, a rider element positionable within said transverse channel relative to said base element and a coupling element positionable between a first position wherein said base element is coupled to said rider element and a second position wherein said base element is uncoupled from said rider element, said rider element comprising a pair of arms, said pair of arms capturing a body portion of said base element therebetween; and

a re-keying mechanism operable when said cylinder is in said unlocked position to move said coupling element from said first position to said second position for repositioning said rider element relative to said base element such that the lock is re-keyed.

35. (previously presented) The lock of claim 34, wherein said base element comprises a pair of legs extending from said body portion, said pair of legs being received in a mating portion of said transverse channel.

36. (previously presented) The lock of claim 35, further comprising a pair of springs disposed in said mating portion of said transverse channel and engaging said pair of legs to bias said locking mechanism into said engaged position.

37. (previously presented) A re-keyable lock comprising:

a cylinder rotatably supported in a housing between a locked position and an unlocked position, said cylinder having a longitudinal slot, a first set of transverse channels and a second set of transverse channels opposingly interlaced with said first set of transverse channels;

a locking mechanism including:

a first set of wafer tumblers resiliently supported in said first set of transverse channels and positionable therein between an engaged position wherein said first set of wafer tumblers engage said housing and a disengaged position wherein said first set of wafer tumblers disengage said housing; and

a set of second wafer tumblers resiliently supported in said second set of transverse channels and positionable therein between an engaged position wherein said second set of wafer tumblers engage said housing and a disengaged position wherein said second set of wafer tumblers disengage said housing;

each wafer tumbler of said first and second sets of wafer tumblers including a base element having an opening formed therethrough which is at least partially aligned with said longitudinal slot, a rider element positionable within said transverse channel relative to said base element and a coupling element positionable between a first position wherein said base element is

coupled to said rider element and a second position wherein said base element is uncoupled from said rider element, said rider element comprising a pair of arms, said pair of arms capturing a body portion of said base element therebetween; and

a re-keying mechanism operable when said cylinder is in said unlocked position to move said coupling element from said first position to said second position for repositioning said rider element relative to said base element such that the lock is re-keyed.

38. (previously presented) The lock of claim 37, wherein said base element comprises a pair of legs extending from said body portion, said pair of legs being received in a mating portion of said transverse channel.

39. (previously presented) The lock of claim 38, further comprising a pair of springs disposed in said mating portion of said transverse channel and engaging said pair of legs to bias said locking mechanism into said engaged position.

40. (new) The re-keyable lock of claim 1 wherein said re-keying mechanism comprises a re-keying element positionable relative to said wafer tumbler within said cylinder to engage said coupling element.

41. (new) The re-keyable lock of claim 13 wherein said re-keying mechanism comprises a re-keying element positionable relative to said wafer tumbler within said cylinder to engage said coupling element.

42. (new) The re-keyable lock of claim 34 wherein said re-keying mechanism comprises a re-keying element positionable relative to said wafer tumbler within said cylinder to engage said coupling element.

43. (new) The re-keyable lock of claim 37 wherein said re-keying mechanism comprises a re-keying element positionable relative to said wafer tumbler within said cylinder to engage said coupling element.

44. (new) A re-keyable lock comprising:

a cylinder rotatably supported in a housing, said cylinder having a longitudinal key slot and a transverse channel;

a locking mechanism positionable between an unlocked position and a locked position, said locking mechanism including a wafer tumbler resiliently supported in said transverse channel, said wafer tumbler including a rider element selectively engagable with a base element in a first engagement position corresponding to a first key and a second engagement position corresponding to a second key; and

a re-keying slot centrally offset from the longitudinal key slot and operable for accessing said rider element when said locking mechanism is in said unlocked position to disengage said rider element from said base element in said first engagement position and engage said rider element to said base element in said second engagement position.

45. (new) The lock of claim 44, wherein said locking mechanism further comprises a plurality of wafer tumblers, each of said plurality of wafer tumblers resiliently supported in one of a plurality of transverse channels formed in said cylinder.

46. (new) The lock of claim 45, wherein each of said plurality of wafer tumblers comprises a first set of wafer tumblers opposingly interlaced with a second set of wafer tumblers.

47. (new) The lock of claim 44, wherein said coupling element comprises a flexible element biased to couple said base element and said rider element, said flexible element being deflectable to uncouple said base element and said rider element.

48. (new) The lock of claim 47, wherein said rider element selectively engages a plurality of engagement formations in said base element, each of said plurality of engagement formations corresponding to a bitting size.

49. (new) The lock of claim 48, wherein each of said plurality of engagement formations comprise a tab.

50. (new) The lock of claim 48, wherein each of said plurality of engagement formations comprise a slot.

51. (new) The lock of claim 44, wherein said re-keying slot is T-shaped.

52. (new) The lock of claim 44, wherein said base element comprises a first body portion and a pair of legs extending therefrom, said pair of legs being received in a mating portion of said transverse channel.

53. (new) The lock of claim 52, further comprising a pair of springs disposed in said mating portion of said transverse channel and engaging said pair of legs to bias said locking mechanism into said engaged position.

54. (new) The lock of claim 52, wherein said rider element comprises a pair of arms extending from a second body portion, said pair of arms capturing said first body portion therebetween.

55. (new) The re-keyable lock of claim 44, wherein said re-keying mechanism comprises a re-keying element positionable relative to said wafer tumbler within said cylinder to engage said coupling element.

56. (new) The lock of claim 55, wherein said rekeying element comprises a re-keying tool insertable into said re-keying slot.

57. (new) A method for in-situ re-keying of a lock, the method comprising:

inserting a first key into a key hole of a lock cylinder;

rotating said lock cylinder relative to a housing with said first key to put the lock into a learn position;

accessing a re-keying slot of said lock cylinder, said re-keying slot being centrally offset from said key hole;

uncoupling a first element of a wafer tumbler from a second element of said wafer tumbler;

replacing said first key with a second key such that said first element is re-positioned relative to said second element;

coupling said first element to said second element of said wafer tumbler;

rotating said lock cylinder to a locked position with said second key; and

removing said second key.

58. (new) The method of claim 57, wherein coupling includes biasing a flexible element interposed between said first element and said second element to couple said first element to said second element.

59. (new) The method of claim 58, wherein uncoupling includes deflecting said flexible element to uncouple said first element from said second element.

60. (new) The method of claim 57, wherein accessing includes inserting a re-keying tool into the re-keying slot.